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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/067,935	02/08/2002	Osamu Mizuno	Q68468	7896

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EXAMINER

KIM, SANG K

ART UNIT. PAPER NUMBER

3654

DATE MAILED: 03/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/067,935

Applicant(s)

MIZUNO, OSAMU

Examiner

SANG KIM

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/9/04 has been entered.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, lines 16-18, "the first detector....disposed closer to the first guide portion..etc." is indefinite and vague. What is being compared to when the first detector disposed closer to the first guide portion? No comparison is being made to define what is being closer to.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Hosomi et al, U.S. Patent No. 5820068.

Hosomi '068 shows a printer (1) comprising a paper holder (17) provided with a first guide portion (38) and a second guide portion (60) for positioning a roll of paper (s), the first guide portion in a first installation state (no reference number), the second guide portion in a second installation state (no reference number), and paper near end detecting means (24) comprising a first detector (64) and a second detector (65) disposed to be engageable with an end face of the roll of paper to detect that the amount of remaining paper is below a predetermined amount (see figures 11a-b), and a sensor (63) which senses operations of the first detector and the second detector; wherein the first detector (64) disposed closer to the first guide portion (38) than the second detector, and the second detector (65) disposed closer to the second guide portion (60) than the first detector, and a plane formed by a locus of a movement of the center axis of the roll of paper when retained by the first guide portion (38, see figure 5), a plane formed by a locus of a movement of the center axis of the roll of paper when retained by the second guide portion (60, see figure 6), and an inner surface (see figure 1) of the paper holder defined between the first guide portion and the second guide portion.

Claim Rejections - 35 USC § 103

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hosomi et al, U.S. Patent No. 5820068, in view of Sato, U.S. Patent No. 6502784 B1.

Hosomi discloses the claimed invention except for a detector movable to change the predetermined amount of paper that triggers a near end signal.

Sato teaches mounting paper detectors (7c, 7d) for detecting that the amount of paper left on a roll is below a predetermined amount so that they are movable to change the predetermined amount to allow for roll cores of different diameters.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the paper detectors of Hosomi movable as taught by Sato to change the predetermined amount of paper sensed by the detectors to allow for roll cores of different diameters.

Response to Arguments

Claim 6 has been canceled.

Applicant's arguments filed on 1/9/04 have been fully considered but they are not persuasive with respect to claims 1-5.

Applicant's amendments reciting in the independent claim 1, that the first detector is a detector for the first installation state disposed closer to the first guide

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portion, and the second detector is a detector for the second installation state, disposed closer to the second guide portion is still anticipated by Hosomi '068.

As stated above, Hosomi '068 shows the first detector (64) is a detector for the first installation state disposed closer to the first guide portion (38), and the second detector (65) is a detector for the second installation state, disposed closer to the second guide portion (60), since the second detector (65) is located above the first detector (64), and the second guide portion (60) is located above the first guide portion (38), as shown in figure 1.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sang Kim whose telephone number is (703) 305-3712. The examiner can normally be reached Monday through Friday from 8:00 A.M. to 5:30 P.M. alternating Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathy Matecki can be reached on (703) 308-2688. The fax phone numbers are (703) 872-9326 for regular communications and (703) 872-9327 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

SK

3/20/04


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